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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,129	11/07/2000	David N. Spiegel	END920000101US1	1094

45092	7590	10/04/2006

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RUTTEN, JAMES D

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/708,129	SPIEGEL, DAVID N.
	Examiner	Art Unit	
	J. Derek Rutten	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 August 2006</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a)☐ All   b)☐ Some * c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 6/19/2006 has been entered.

2.   This action is responsive to Applicant's amendment dated 6/19/2006, responding to the

4/17/2006 Office action provided in the rejection of claims 1-19. Claims 1, 9 and 17-19 have

been amended, and new claim 20 has been added. Claims 1-20 remain pending in the

application and have been fully considered by the examiner.

Response to Amendment/Arguments

3.   The amendment has obviated the rejection of claims 1-19 under 35 U.S.C. § 112, 2nd

paragraph. Therefore, this rejection has been withdrawn.

4.   On pages 11 and 12, Applicant essentially argues in response to the rejection of claim 1-

19 under 35 U.S.C. § 112 1st paragraph, that the claimed limitations of a "database of all second

maintenance items that are known to the database as being able to be installed" is "explicitly

supported" on page 8 lines 13-22 of the specification as well as implicitly supported due to the

database as being a "master database" with a "global nature". However, no explicit support was

found for a database containing information regarding an ability to be installed. Further,

Applicant's arguments regarding implicit support include a reference to page 8 lines 14-15 of the specification that provides a definition of the acronym PTF as "Program Temporary Fixes". However, such a definition of PTF was not found in the originally filed specification. Without a pre-existing definition of the acronym, it cannot be argued that the originally filed specification provides support for such a feature. While it is clear that the claimed database should have at least some items that have an ability to be installed, the specification does not appear to specifically address a database having knowledge of an ability of a maintenance item to be installed. As such, Applicant's arguments are not persuasive.

5.   In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a database with maintenance items that are known to the database as being able to be installed on the computer system, whether the known second maintenance items are included in a particular upgrade packages or not" – see page 13 paragraph 2) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6.   On pages 13 and 14, Applicant argues that Stupek does not disclose searching "for records that have the dependency information". However, Stupek discloses notifying users of dependency information. See column 7 lines 33-35. Since notification of dependency occurs, a search for dependency information, while it may not be expressly disclosed, is inherent since notification could not occur without a search for the information. Therefore, Applicant's argument is not persuasive.

7.   It is noted that at the top of page 14, Applicant suggests that since the upgrade database is

contained on the CD-ROM, that "the upgrade database is included in the upgrades ... and are not

a separate component." However, Stupek column 3 lines 44-52 (see 4/17/06 Office Action page

7) discloses that resource upgrades are packaged along *with* the upgrade database, and are clearly

separate. Further, these components can also be provided by an "on-line service", and are not

restricted to a CD-ROM distribution.

8.   At the bottom of page 14, Applicant essentially argues that Stupek does not search

"specifically to find records that have prerequisite items and/or corequisite items." However, as

noted in the previous Office Action (page 3 paragraph 4), Stupek column 7 lines 33-35 discloses

notification of dependency information, and therefore provides inherent support. If there was no

search for dependency, there could be no notification of dependency information.

9.   On page 15, Applicant essentially argues that the Taylor reference does not teach adding

packages to an original list of items. However, as submitted in previous Office Actions (e.g.

4/17/06 pages 3-4), Stupek discloses a first list, and the Taylor reference teaches adding

dependency information to a list as recited in the previous Office action on page 10. Further,

Taylor teaches a preexisting action list, i.e. first list, to which dependency information is added.

See Taylor column 5 lines 29-31:

         If there is an action list, add module 112 adds the name of the dependent package to the action list.

Thus, Taylor clearly teaches adding dependency information to an initial first list.

10.   On pages 15-16, Applicant essentially argues that the Stupek reference does not disclose

"subsequent" ordering, receiving, and applying. However, as submitted previously (e.g. 9/8/05

page 4 and 4/17/06 page 4), broad interpretation of these limitations read on Stupek column 5

lines 48-63:

> When the job is ready to be installed to the target server, the server upgrader connects with the
> server...and then sends the job...to a staging area. The staging area may...be anywhere else in the
> network capable of handling the deposit and retrieval of upgrade files....the agent executes the
> instructions in the control file **thereby installing the packages from the package directories 71
> to the target network resources 3.**

Execution of the instructions in the control file could be broadly interpreted as ordering and

retrieving the upgrade files from the package directories in order to apply them to the system. As

described in the passage, this necessarily occurs at the end of the process since all packages must

be known before they can be installed.

11.   Applicant's arguments (see page 16 paragraph 2) fail to comply with 37 CFR 1.111(b)

because they amount to a general allegation that the claims define a patentable invention without

specifically pointing out how the language of the claims patentably distinguishes them from the

references.

Claim Objections

12.   Claims 1, 9, and 17-19 objected to because of the following informalities: A typo exists

in the new limitations resulting in the phrase "known **to the to the** database" [emphasis added].

Appropriate correction is required.

Claim Rejections - 35 USC § 112

13.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

14.   Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention. Independent claims 1, 9, 17, 18, and 19 all recite the phrase "...database of *all* second

maintenance items that are *known to the database* as being *able to be installed*...", e.g. lines 6

and 7 of claim 1. While supporting a database of known second maintenance items (page 8 lines

13-22), the originally filed specification does not expressly support a database containing *all*

known maintenance items known to the database as being *able to be installed*. Further, there is

no support "items that are known to the database". This implies that the database is some type of

dynamic/active component, while when in the context of a "database application having a

database," the term "database" appears to describe a passive data structure. The specification

does not appear to describe a database as an active component, and one of ordinary skill in t the

art would not known how to make and/or use it. Claims 2-8 and 10-16 are rejected as being

dependent upon rejected base claims. The limitation "database of *all* second maintenance items

that are *known to the database* as being *able to be installed*" will be interpreted as --database of

all second maintenance items that are *known* as being able to be installed--.

Claim Rejections - 35 USC § 103

15.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16.   Claims 1, 3-9, 11-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over prior art of record U.S. Patent No. 5,960,189 to Stupek et al. (hereinafter "Stupek") in view

of prior art of record U.S. Patent 5,721,824 to Taylor (hereinafter "Taylor").

As per claim 1, Stupek discloses:

A method of maintaining software on a computer system (See Abstract)

comprising the steps of:

Bringing up first and second host sessions on a computer system (FIG. 1 elements

1 and 2);

Starting in said first host session, a software recording application having data

on existing first maintenance items that have been previously applied to said computer

system See figure 1 reference 5 "Management Information Base", column 3 lines 22-30:

> A management information base (MIB) within the server **maintains basic descriptive information** about each of the resources **available** on the server.

Resources that are currently available and exist on the server, inherently must have been

previously applied, otherwise they would not be available.

Starting in said second host session, a database application having a database of

all second maintenance items that are known as being able to be installed on the

computer system, and including prerequisite items and corequisite items corresponding

to each of said known second maintenance items See figure 1 reference 9 "Upgrade

Database", column 3 lines 44-52:

> In addition to the resource upgrades 7, the CD-ROM contains an **upgrade database 9, which stores information about each of the upgrade packages 6** (e.g., name and

> location of the package on the CD-ROM, description of the upgrades, and instructions for
> installation of the package to the server), and the individual upgrade objects 8 within each
> package 6. If the upgrades 7 are provided by an on-line service, the upgrade database 9
> will also be provided by the service.

and column 7 lines 8-10:

> The database also contains information regarding the dependencies between the package
> and other upgrade objects or packages...

Maintenance items must inherently be known if information regarding them is stored in a

database. As a database is a collection of knowledge, it would not exist without

knowledge of its members. Stupek also discloses storing information for all known

updates by referring to "each of the upgrade packages."

Activating a maintenance application on said computer system (figure 1 reference

11 "Upgrade Advisor");

> *Entering a first list of new third maintenance items in said maintenance*

application See figure 1 reference 7 "Resource Upgrades", column 3 lines 31-43:

> **Upgrades** to the network resources are provided to a server manager by a distribution
> medium (not shown), such as a CD-ROM. The upgrades 7 may also be provided by an
> on-line service (not shown), such as a bulletin board service administered by a
> manufacturer of network resources.

Upgrades inherently provide a new version of a product, otherwise they might be called a

"downgrade", or "rollback". Also see column 3 line 57 – column 4 line 5.);

> *Searching said database of known second maintenance items for records*

matching each of said new third maintenance items to find records that have said

prerequisite items and corequisite items, See column 4 lines 20-27:

> The upgrade advisor then **retrieves upgrade information from the upgrade database**
> and performs two types of comparisons: a) whether or not a particular upgrade package
> corresponds to a resource on the server, and b) whether or not the version number of the
> upgrade package matches the version number of the corresponding network resource (i.e,
> whether or not the upgrade package represents a true upgrade for the existing network
> resource).

Also column 7 lines 6-35, especially lines 29-33:

> Therefore, the dependency information in the Package **database 25 describes not only the dependencies between packages on the CD, but also all dependencies** between an upgrade package and any upgrade not available on the CD.

Also column 4 lines 6-9:

> When the analysis is complete, the **upgrade advisor 11 presents a report** and/or graphical display to the user. This output is in the form of **upgrade recommendations,** each supported by an explanation of the reasons for upgrade.

The first list is analyzed by the upgrade advisor and modified according to the current

maintenance needs, producing a report, or list, of prerequisites and corequisites.);

Also see column 7 lines 33-35. Since notification of dependency occurs, a search for

dependency information, while not expressly disclosed, is inherent since notification

could not occur without a search for the information.

thereafter determining from said software recording application which items on

said first list have already been received, and adding those items not received to an order

list See column 4 lines 20-27 as cited above describes the determination of items that

have already been received; also column 4 lines 45-48:

> When the upgrade advisor 11 and/or the user have **selected 100 the network resources 3 that need to be upgraded**, an upgrade installer 17 oversees the automatic installation of the packages to the server.

A determination of which items have already been received is inherent in the selection of

"network resources that need to be upgraded". If a resource does not need to be

upgraded, then it must have already been received. Selection of resources is impossible

without determination. Also column 5 lines 41-45

> In the server upgrader 22, several upgrade packages 7 and the corresponding installation instructions 20 are **grouped 108 into a "job"** 18. Within each job 18, the installation instructions for every package are included in a control file 18a.

Grouping packages into a job is considered adding to an order list.); *and*

thereafter ordering, receiving, and applying said items on said order list See

column 4 lines 45-48 as cited above in addition to column 4 lines 48-53:

> At the outset, the appropriate upgrade packages 7 are **retrieved** 102 from the distribution medium (or the on-line service) and **supplied** 106 to a server upgrader 22 located in the upgrade installer 17. Installation instructions 20 are retrieved 104 from the database 9 and are supplied 106 to the server upgrader 22.

Also column 5 lines 48-63:

> When the job is ready to be installed to the target server, the server upgrader connects with the server...and then sends the job...to a staging area. The staging area may...be anywhere else in the network capable of handling the deposit and retrieval of upgrade files....the agent executes the instructions in the control file **thereby installing the packages from the package directories 71 to the target network resources 3.**

Stupek column 4 lines 6-9 discloses presenting a list of upgrades to a user:

> When the analysis is complete, the upgrade advisor 11 presents a report and/or graphical display to the user.

Stupek takes an original list of available upgrades and analyses it to determine the set of

necessary upgrades. A list is then generated to display the results of the analysis. Stupek

further describes automatic installation of the displayed list using a Package database that

describes any dependencies related to the package in column 7 lines 6-15:

> To enable automatic installation of the package, the database contains the package script 25g (the installation instructions for the package). The database also contains information regarding the dependencies between the package and other upgrade objects or packages: child dependencies 25h are the upgrade objects associated with a package; sibling dependencies 25j are the packages upon which a package depends; and parent dependencies 25i are the packages or upgrade objects which together constitute a larger package.

However, Stupek does not expressly disclose "adding said corresponding prerequisite

items and corequisite items to said first list." However, in an analogous environment,

Taylor teaches adding dependency information to a list in column 2 lines 20-23:

> If the dominant package has a dependent package not already installed, the method constructs a trailer script process and an action list. The action list has action entries identifying dependent packages not previously installed.

Also see Taylor column 5 lines 29-31:

> If there is an action list, add module 112 adds the name of the dependent package to the action list.

This passage teaches that Taylor adds a package to a preexisting first list.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Taylor's teaching of adding dependency packages to a list

with Stupek's first list. One of ordinary skill would have been motivated to install a

multi-package distribution pack with package dependencies on a target system in a single

installation operation (Taylor column 1 lines 58-60).

As per claim 3, the above rejection of claim 1 is incorporated. Stupek further

discloses the use of an operating system with the computer system (column 1 line 17).

As per claim 4, the above rejection of claim 3 is incorporated. Stupek further

discloses the use of a network with the computer system (column 1 line 13).

As per claim 5, the above rejection of claim 1 is incorporated. Stupek further

discloses the practice of keeping track of what software has been installed or uninstalled

(column 6 lines 45-47).

As per claim 7, the above rejection of claim 1 is incorporated. Stupek further

discloses the practice of storing information relating to program updates in a file (column

6 lines 43-45).

As per claim 8, the above rejection of claim 1 is incorporated. Stupek further

discloses the practice of updating software on the computer system (column 5 lines 48-

63).

As per claim 9, Stupek discloses:

A system for maintaining software on a computer system (FIG. 1) *comprising:*

a maintenance application having a first list of third maintenance items wherein

the first list comprises a list of maintenance items needed to be applied to said computer

system (figure 1 reference 11 "Upgrade Advisor"; figure 1 reference 7 "Resource

Upgrades", column 3 lines 31-43:

> Upgrades to the network resources are provided to a server manager by a distribution medium...

Also column 3 line 57 – column 4 line 7:

> When the upgrades 7 become available to the network (e.g., by inserting the CD-ROM into the server manager drive, or by logging into the on-line service), an upgrade advisor 11 in the upgrade device 10 automatically analyzes each network resource 3 currently on the server 1 to determine the availability and **necessity of the corresponding upgrade 7**. When the analysis is complete, **the upgrade advisor 11 presents a report** and/or graphical display to the user.

All other limitations have been addressed in the above rejection of claim 1.

As per claims 11-13, 15 and 16, the above rejection of claim 9 is incorporated.

All further limitations have been addressed in the above rejections of claims 3-5, 7, and 8,

respectively.

As per claim 17, all limitations have been addressed in the above rejections of

claims 1 and 9.

As per claim 18, Stupek discloses a computer program product (column 3 lines 31-33). Stupek further discloses a computer readable medium and program instruction means (column 11 line 9 – column 14 line 33). All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 20, Stupek discloses: *wherein the database is separate from the maintenance application.* See FIG. 1 elements 9 and 11.

17.   Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stupek et al as applied to claims 1 and 9, respectively, above, and further in view of "Y2K Compliance and the Distributed Enterprise" by Gowan et al.

As per claim 2, Stupek does not expressly disclose software maintenance on a mainframe.

However, in an analogous environment, Gowan et al. teaches the benefits of upgrading a mainframe computer system (page 68, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Stupek's software maintenance system with Gowan's concept of upgrading a mainframe computer in order to facilitate a swift and automated upgrade process. This is desirable since mainframe computers serve a large number of users, and

having a swift and automated upgrade process ensures the availability of correct and

efficient software.

As per claim 10, all further limitations have been addressed in the above rejection

of claim 2.

18.   Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stupek

and Taylor as applied above to the rejections of claims 1 and 9, further in view of "IMS/ESA

Sysplex Data Sharing: An Implementation Case Study" by Boyle et al. (hereinafter "Boyle").

As per claim 6, the above rejection of claim 1 is incorporated. Stupek further

discloses the use of a database application through the use of the "server database"

(column 4 lines 14-16). Stupek does not expressly disclose the use of IBM ServiceLink.

However, in an analogous environment, Boyle teaches that ServiceLink can be used in

software maintenance (top of page 32). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to use Boyle's teaching of ServiceLink

with Stupek's database. One of ordinary skill would have been motivated to provide

early opportunity to review software maintenance issues (Boyle: 2nd paragraph of page

32).

In regard to claim 14, the above rejection of claim 9 is incorporated. All further

limitations have been addressed in the above rejection of claim 6.

19.   Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stupek and

Taylor as applied to claim 1 above, further in view of IBM SMP/E as described on page 8 of the

originally filed specification (hereinafter "SMP/E").

In regard to claim 19, the above rejection of claim 1 is incorporated. Stupek does

not expressly disclose: *recording what software has been taken off the computer system,*

and recording what software has been cloned. However, in an analogous environment,

SMP/E teaches a software recording application that records what software has been

taken off a computers system, and what software has been cloned. See page 8 lines 5-9:

> One example of such a recording application is a program provided by IBM Corp. known
> as SMP/E. This program can record what software has been put on, track such software,
> record what software has been taken off, and record what software has been cloned, all
> on an 05/390 architecture system.

As described in the specification, SMP/E is a "known" application that provides these

capabilities. While supporting documentation of the SMP/E application has not been

previously supplied, this passage clearly describes its use in terms of prior art. It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

use the recording abilities of SMP/E with the Stupek's "MIB". One of ordinary skill

would have been motivated to supply accurate information regarding available resources

(see Stupek column 3 lines 28-30). All further limitations have been addressed in the

above rejection of claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The

examiner can normally be reached on T-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr

TUAN DAM
SUPERVISORY PATENT EXAMINER